

PATENT COOPERATION TREATY

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WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220 2004 P 02896W0

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/050214

International filing date (day/month/year)
19.01.2005

Priority date (day/month/year)
20.02.2004

International Patent Classification (IPC) or both national classification and IPC
H04Q11/04

Applicant
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1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050214

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material:
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing:
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/050214

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:
- ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ not paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
- ☐ complied with
 - ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, this report has been established in respect of the following parts of the international application:
- ☐ all parts.
 - ☒ the parts relating to claims Nos. 1-16

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	5,6,10,11,14-16
	No: Claims	1-4,7-9,12,13
Inventive step (IS)	Yes: Claims	6,11
	No: Claims	1-5,7-10,12-16
Industrial applicability (IA)	Yes: Claims	1-16
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item IV.

The search examiner distinguishes the following subjects and the groups of claims containing them:

1. Subject 1: claims 1-16
2. Subject 2: claims 17-23, 26-29
3. Subject 3: claims 24,25

Subject 1 (searched): claims 1-16:

Method and apparatus to establish an IP connection in correspondence to an existing TDM connection whereby a setup signal containing IP connection information is sent over the TDM connection, a reply is received back, and the IP connection is established

Subject 2 (not searched): claims 17-23,26-29:

Method and system to provide call services on an IP connection in correspondence to an existing TDM connection whereby a trigger causes the TDM switch to pass control of the call to the IP concentrator

Subject 3 (not searched): claims 24,25:

Method to provide call services on an IP connection in correspondence to an existing TDM connection whereby a call forwarding feature is activated in the TDM network

For the following reasoning, the prior art document US 6 256 389 A (D1) is taken into account. From this prior art document, a method and apparatus are known to introduce (a data session=) an IP connection after setting up (a voice connection=) a TDM connection.

With reference to D1, the first group of claims (1-16) yields the potential special technical feature of coupling a TDM call service through the IP connection, hence solving the objective problem of how to provide call services on an IP connection.

With reference to D1, the second group of claims (17-23,26-29) yields the potential special technical feature of a trigger, hence solving the objective problem of how to initiate the

TDM switch to pass control of the call to the IP concentrator.

With reference to D1, the third group of claims (24,25) yields the potential special technical feature of a call forwarding feature in the TDM network, hence solving the objective problem of how to instruct the TDM switch to forward any calls for a particular subscriber to the IP concentrator.

No further special technical features are available by means of which a relationship could be established between the subject-matter as defined in the three groups of inventions mentioned above.

Consequently, neither the objective problems underlying the subject-matter of the three claimed inventions, nor their solutions as defined by the special technical features described above allow for the link of a single general inventive concept to be established between the said inventions.

The application hence does not meet the requirements of unity of invention as defined in Rule 13.1 and 13.2 PCT.

Re Item V.

1 Reference is made to the following documents:

D1: US-A-5 256 389 (DALRYMPLE W C P ET AL) 26 October 1993 (1993-10-26)

D2: US 2001/005372 A1 (CAVE E K ET AL) 28 June 2001 (2001-06-28)

2 INDEPENDENT CLAIM 1

2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) and Rule 64.1 PCT.

Document D1 discloses (the references in parenthesis applying to this document) a method to introduce an IP-subscriber connection in correspondence to an existing

TDM connection between a subscriber A on an A-side of the TDM connection and a subscriber B on a B-side of the TDM connection (column 2, lines 26-29), comprising the steps of:

- sending a set up signal including IP connection information and a caller ID of the subscriber A to the B-side over the existing TDM connection (column 7, lines 49-50; figure 4);
- inviting the A-side to set up an IP connection from the B-side including IP connection information and a caller ID of the subscriber B (column 7, lines 53-58; figure 4); and
- establishing the IP-subscriber connection based on the IP connection information and caller ID from the subscriber A and the subscriber B (column 7, lines 58-62; figure 4).

- 2.2 Furthermore, the subject-matter of claim 1 also lacks novelty (Article 33(2) and Rule 64.1 PCT) with respect to document D2, as D2 discloses all technical features of claim 1 (pages 9-10, paragraphs 78-79).

3 INDEPENDENT CLAIMS 7, 12

The subject-matter of independent method claim 7 and independent apparatus claim 12 essentially corresponds to this of apparatus claim 1. Consequently because of the above, the subject-matter of independent claims 7, 12 is not new (Article 33(2) and Rule 64.1 PCT).

4 DEPENDENT CLAIMS 2-5, 8-10, 13-16

Dependent claims 2-5, 8-10, 13-16 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).

5 DEPENDENT CLAIMS 6, 11

- 5.1 The subject-matter of dependent method claim 6 differs from D1 in that it contains a step of coupling a TDM call service through the IP connection.

- 5.1.1 The subject-matter of claim 6 is therefore novel (Article 33(2) PCT). The problem to be solved by the present invention may be regarded as how to provide TDM call services on an IP connection.
- 5.1.2 The solution to this problem proposed in claim 23 of the present application is considered as involving an inventive step (Article 33(3) PCT) because the coupling step effectively introduces and emulates a TDM call service on the IP connection.
- 5.2 The subject-matter of dependent method claim 11 essentially corresponds to this of method claim 6.